blowing a heavy gale from sw., struck the ship in a heavy squall from ssw. to nnw., lasting only a few minutes from any one direction; from 2 a.m. to 4 a.m. had very heavy squalls from w. with heavy rain, wind backing to sw. after each squall; from 8 to 10 a. m. heavy squalls from nw., ship's position at noon, N. 34° 42′, W. 74° 05′. The s. s. "Fortunatus," G. R. Mawer, commanding, reported that at 2 a. m. the wind moderated, and at 7 a. m. it came out from ne. and increased a very large iceberg; temperature of the air, 49°; water, 48°. to a heavy gale with very heavy sea from ene., barometer at 8 a. m., 29.01 (736.8); latitude at noon, 38° 31′ N., longitude, 13° 20′ W. At 4 a. m. the s. s. "Louis Bucki," R. Mount. a large iceberg; s. s. "Pavonia," in N. 43° 49′, W. 51° 37′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg; in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, W. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, w. 50° 04′, passed a large iceberg in N. 43° 49′, passed 73° 20′ W. At 4 a. m. the s. s. "Louis Bucki," R. Mount, a large iceberg; in N. 43° 48′, W. 52° 04′, passed a medium-commanding, in N. 36° 44′, W. 74° 50′ had wind from n., resized iceberg; also, in N. 43° 57′, W. 52° 12′, passed another. maining steady and blowing with hurricane force. Captain 6th.—S. S. "Wyoming," at 3.30 p. m., in N. 48° 3′, W. 42° Mount reports "from midnight of 25th to 4 a. m. the wind 45′, passed a large iceberg; s. s. "St. Stephen," in N. 47° 54′, passed a large iceberg; s. s. "St. Stephen," in N. 47° 54′, hauled twice around the compass from sw. by the w. to n., and to s. by e."

The s. s. "City of Puebla" appears to have again entered the southwest quadrant of the disturbance after it had recurved and passed northeastward; that vessel, in about N. 35°, W. 75°, on the 26th, had barometer falling from 20.8 (756.9) to29.6 (751.8), with wind hauling to nnw. and blowing a gale, with heavy rain; at 10 a.m. the weather began to moderate

and the barometer rose.

After reaching the ocean the rate of movement of the stormcentre appears to have increased greatly, and by midnight of passed a large iceberg. the 26th the centre was between W. 60° and 65°, the barometer remaining about 29.1 (739.1), and strong gales were reported in all quadrants of the disturbance.

passage of the storm-centre, while strong gales were experienced by all vessels between the meridians of 40° and 60°

W., and from N. 40° to N. 50°.

On the 28th, the region of least pressure, where the barometer read 29.0 (736.6), was near N. 50°, W. 40°, and moderate to strong w. and sw. gales were now reported on the fiftieth parallel and between W. 30° and 40°.

On the 29th, the pressure had increased to 29.9 (759.4), and the disturbance had disappeared beyond the region covered by large iceberg.

the reports.

OCEAN ICE.

On chart i are also shown the eastern and southern limits of the north Atlantic ice-region for August, 1885. These limits are determined from reports furnished by shipmasters, and from trustworthy data published in the "New York Maritime Register" and other newspapers.

During the month the easternmost icebergs were observed between the meridians of 42° and 43° W., and the parallels of 45° and 50° N., and the extreme southern limit of the ice-region was near 43° 50' N., 52° 0' W. The small number of icebergs observed during August, 1885, would seem to indicate that the Atlantic is now comparatively clear of ice.

A comparison with the chart for the preceding month (July, 1885,) shows that, while the icebergs are considerably diminished in number, they are, however, somewhat farther eastward than those of July; the southern limit is about one degree north of that for last month.

The following table shows the comparison between August, 1885, and the same month of the three preceding years:

Southern lim	it.		Eastern limit.				
Date.	Lat. N.	Lon.W.	Date.	Lat. N. Lon. W.			
August, 1882	0 / 46 50 43 26 43 24 43 48	0 / 46 00 51 41 48 44 52 04	August, 1882	0 / 0 / 46 50 46 00 48 00 44 00 47 50 43 50 48 03 42 45			

Icebergs were reported during the month as follows:

1st.—S. S. "Ontario," in N. 52° 8', W. 50° 47', passed four large icebergs.

2d.—S. S. "Ontario" passed several large icebergs to the are from 1° to 3° above the normal.

westward of Belle Isle; s. s. "Schiedam," in N. 48° 12', W.

44° 35′, passed a large iceberg.
3d.—S. S. "Australia," in N. 48° 00′, W. 46° 47′, passed an iceberg about one hundred and fifty feet high, with several small pieces near it; also passed another berg about fifteen miles to the southward.

4th.—S. S. "Norseman," in N. 48° 10', W. 48° 20', passed

W. 42° 45', passed an iceberg about two hundred and fifty feet high; temperature of water, 48°; bark "Natant," in N. 44° 55', W. 43° 10', passed a large iceberg.

9th.—S. S. "Neckar," in N. 48° 48′, W. 43° 30′, passed a medium-sized iceberg; temperature, 57°.

10th.—S. S. "Elysia," in N. 44° 08', W. 52° 30', passed an iceberg.

23d.—S. S. "St. Laurent," in N. 48° 06', W. 47° 40', passed an iceberg; temperature of air, 57°.2; water, 50°.0.
24th.—S. S. "Lydian Monarch," in N. 48° 55′, W. 47° 18′,

29th.—Brig "Bessie May," in N. 47° 10', W. 47° 20', passed six icebergs, the largest being about one-quarter of a mile long and about one hundred feet high.

During the 27th the storm-centre moved rapidly northeast-ward, the barometer falling as low as 28.8 (731.5) during the large icebergs and several pieces; s.s. "City of Berlin," in N. 46° 55', W. 47° 04', passed three icebergs and several small pieces.

The following are taken from the daily ice reports of the "International Nautical Magazine."

August 2d.—Ship "W. H. Smith," in N. 48° 17', W. 49° 09',

passed five large icebergs; water, 48°; air, 52° 3d.—Ship "W. H. Smith," in N. 47° 50′, W. 50° 00′, passed a large iceberg.

8th.—Brig "Aquatic," in N. 48° 40', W. 43° 25', passed a

SIGNAL SERVICE AGENCIES.

Signal Service agencies have been established in the Maritime Exchange buildings at New York and Philadelphia, and in the Custom-House, Boston, where the necessary blanks and other information will be furnished to ship-masters

In pursuance of the arrangements made with the Meteorological Office of London, England, there were cabled to that office from New York during August, 1885, six reports concerning storms and icebergs encountered by vessels in the Atlantic west of the forty-fifth meridian; one message was sent from Boston.

TEMPERATURE OF THE AIR.

[Expressed in degrees. Fahrenheit.]

The distribution of mean temperature over the United States and Canada for August, 1885, is exhibited on chart ii by the dotted isothermal lines; and in the table of miscellaneous data are given the monthly mean temperatures, with the departures from the normal, for the various stations of the Signal Service.

On chart iv the departures from the normal temperature are exhibited by lines connecting stations of equal departure. It will be seen from this chart that over the greater part of the country the month was colder than the average August. departures below the normal temperature were most marked over the northern districts from Montana and Wyoming eastward to New England, where they varied from 4° to 7°. Along the middle and south Atlantic coasts, in the Gulf States, Rio Grande Valley, southern slope, middle plateau, north and middle Pacific coast regions the mean temperatures correspond very nearly with the normal, there being slight departures both above and below in these districts. In the southern plateau and south Pacific coast region, the mean temperatures In the following table are given the mean temperatures for the several geographical districts, with the normal and departures, as deduced from Signal Service observations:

Average temperatures for August, 1885.

Districts.	Average fo Signal-Se serva	Comparison of August, 1885, with		
	For sev- eral years.	For 1885.	the average for several years.	
		0	0	
Kew England	68.3	66.2	— 2.	
fiddle Atlantic States	73.7	73-4	— o.;	
outh Atlantic States		79.0		
lorida Peninsula		81.9	∔ o. ¹	
lastern Gulf States		78.9	o.;	
Vestern Gulf States		80.9	0.	
lio Grande Valley		83.1	0.4	
'ennessee	76.8	76.9	+0.	
)hio Valley,		72.6		
lower Lake region	70.4	65.5	- 4.9	
pper Lake region	66.4	61.3	— 5.	
Extreme Northwest	66.0	60.7	- 5.	
Jpper Mississippi Valley	73.6	69.6	- 4.	
fissouri Valley	72.6	67.8	- á.i	
forthern slope		63.7	- 3.	
fiddle slope		71.2	— ĭ.,	
outhern slope		77.7	+ 0.	
outhern plateau	75.4	76.6	+ 1.	
fiddle plateau		72.2	<u> </u>	
orthern plateau	70.3	71.3	‡ 1.	
lorth Pacific coast region	64.1	64.3	∔ o.:	
Liddle Pacific coast region	66.4	67.2	↓ •	
outh Pacific coast region	69.1	72.2	∔ 3.	

DEVIATIONS FROM NORMAL TEMPERATURES.

In the table below are given, for certain stations, as reported by voluntary observers, the normal temperatures for August for a series of years; the mean temperature for August, 1885, and the departures from the normal:

Stations.	County.	Normal tem- perature for August.	Number of years,	Mean temper- ature for Aug., 1886.	Departure.	
Arkansas.	Boone	o 72•5	3	o 78.4		
Dakota.		73	3	70.4	+2.3	
Webster	Day	74.1	3	67.1	-7.0	
Collinsville	Madison	76.7		70.4	6.3	
Anna	Union	77.9	10	75.8	-2.I	
Mattoon	McHenry	75.9 68.2	5	75.2	-0.7	
Riley	Perry	74.8	24	66.9	-1.3	
Sycamore	DeKalb	69.9	4	74.3	0.5	
Peoria	Peoria	75.2	30	64.4 73.2	-5.5 -2.0	
Indiana.		/3.4	35	/3.2	-2.0	
Lafavette	Tippecanoe	72.3	6	68.3	-4.0	
Logansport	Case	72.8	20	70.4	-2.4	
Vevay	Switzerland	75.9	21	74-3	—ı.6	
Independence	Montgomery	78.4	14	74.8	-3.6	
Manhattan	Riley	77.1	25	74.1	-3.0	
Wellington	Sumner	75.6	7	. 74.4	-1.2	
Yates Centre	Woodson	75.8	5	74.1	-1.7	
Gardiner	Kennebec	66.7	49	63.5	-3.2	
Fallston	Harford	71.7	13	70.4	—1.3	
Somerset	Bristol	72.2	[71.2	-1.0	
Worcester	Worcester	68.2	47	64.5	-3.7	
Carson City	Ormsby	73.2		70.9	+2.3	
South Orange	Essex	71.1	15	66.8	-4.3	
North Volney	Oswego	68.o	18	63.2	-4.8	
Palermo	Oswego	67.3	32	61.6	-5.7	
Menand Station	Albany	70.1	3	66.5	-3. 6	
Wauseon Pennsylvania.	Fulton	69.8	15	65.8	-4.0	
Dyberry	Wayne	65.2	18	63.7	—1. 5	
New UlmVermont.	Austin	82.4	14.	83.7	+1.2	
Woodstock	Windsor	65.0	18	63.0	2.0	
Bird's Nest	Northampton Wythe	77.0 71.0	21	79.9 70.0	+2.9 +2.9	
West Vincinia						
West Virginia. Helvetiu	Randolph	67.7	9	67.2	— 0.5	

The following notes on the temperature for the summer months of 1885, are also reported by voluntary observers:

Riley, McHenry county, Illinois: the mean temperature for the summer of 1885 is 66°.9, or 1°.3 below the summer normal for the last twenty-four years. During that period the mean temperature for summer has been lower than that for 1885, in but four years, viz., 1865, '66, '76, and '82.

Logansport, Cass county, Indiana: in but five years, viz., 1856, '66, '75 and '83, since 1855, has the mean temperature

for August been lower than that for August, 1885.

Yates Centre, Woodson county, Kansas: the mean temperature for the summer of 1885 is 75°.1, or 0°.7 below the summer average for the last five years.

South Orange, Essex county, New Jersey: the mean temperature for the summer of 1885 is 70°.5, or 1° below the sum-

mer normal for fifteen years.

Palermo, Oswego county, New York: the mean temperature for the summer of 1885 is 63°.0, or the lowest summer temperature

ture recorded in the last thirty-two years.

North Volney, Oswego county, New York: mean temperature for the summer of 1885, 65°.1, is the lowest summer mean recorded in the last seventeen years. The warmest summer of that period occurred in 1870, the mean being 71°.6. The mean temperature for August, 1885, 63°.2, is the lowest re-

corded for that month during the last eighteen years. Strafford, Orange county, Vermont: August, 1885, was colder than any corresponding month in the eleven preceding years.

Woodstock, Windsor county, Vermont: mean temperature for August, 1885 is 63°.0; the highest August mean for the last eighteen years, 68°.4, occurred in 1877; the lowest, 60°.7, occurred in 1869.

Beloit, Rock county, Wisconsin: the mean temperature (65°.1) for August, 1885, is the lowest recorded for that month

during the last thirty-six years.

Wauseon, Fulton county, Ohio: during the last fourteen years the month of August has in but two instances been colder than August of the current year. The mean temperature for the summer season, June, July and August, of 1885, is 68°.9, or 1°.3 below the normal for the period above named.

HIGH TEMPERATURES.

Cedar Keys, Florida: the heat on the 5th was very oppressive. The first case of sunstroke ever known at this place occurred on that date.

Merced, California: very hot weather prevailed in this vicinity about the 18th; on that date the temperature remained at 120° in the shade for several hours during the day, and was but slightly below 100° at night.

Walla Walla, Washington Territory: the 18th was the hottest day experienced in this locality for several years; the thermometer in the shade indicated 108°; business was almost

entirely suspended on account of the intense heat.

Dayton, Washington Territory: the maximum temperature on the 18th, 108°.7, is the highest recorded at this station since its establishment. Very warm weather also prevailed on the 15th, 16th, and 17th, the temperature reaching 102°. On the 18th a thermometer placed against a window casement, in the sunshine, rose to 140° at 2 p. m., local time.

RANGES OF TEMPERATURE.

The monthly, and the greatest and least daily ranges of temperature are given in the table of miscellaneous meteorological data. The monthly ranges were greatest at certain stations in Idaho, Montana, and Washington Territories, 64°, at Fort Benton, Montana, being the largest reported; they were least along the Gulf and Pacific coasts, the least, 18°.9, occurring at Key West, Florida.

FROSTS.

Frosts occurred in the various states and territories during the month, as follows:

Colorado.—Pike's Peak, 8th, 13th, 24th, 27th; Braddock, 9th, 11th to 22d, 25th to 31st.

Connecticut.—New Haven, Bethel and Hartford, 27th, 28th.

Table of comparative maximum and minimum temperatures for August.

		For 1885.		Since establishment of station.			
State or Territory.	Station.	Max.	Min.	Max.	Year.	Mìn.	Year.
		٤	•	•		٥	
Alabama	Mobile	94.2	69.0	100.0	1874 1874	63.0 61.5	1584
Arizona	Montgomery Prescott	95.4 96.7	50.3	103.0	1878	38.0	1870
Do	Yuma			115.0	1879 1884	04.0	1879
Do	Fort Smith Little Rock		57.I 64.3	103.7	1881	58.4	1834 1884
California	San Francisco	81.0	52.0	89.0	1879	50.0	75,79,82
Do Colorado	Red Bluff Denver	107.5 92.8	58.5 46.4	110.5	1878 1878	52.0 44.0	1881 1870
Do	Pike's Peak	52.2 86.5	26.0	62.0	1878	15.0	1882
Connecticut	New Haven		45.1	90.0	1873, 1876. 1881, 1884	45.7	1884
Do	New London Fort Buford	85.0	48.8	90.0	1873 1882	47.5 30.0	1884 1883
Do	Yankton	90.5 88.6	39.6 46.2	107.0	1874	45.0	1875 1881
Delaware	Del. Break water			93.0	1881	60.0	1881
Do Dist, of Columbia	Cape Henlopen Washington City	98.1 94.2	53.5 50.8	0.101	1881	50.0	1874
Florida	Jacksonville	94.1	70.2	100.0	1874	66.0	1874, 1875
Do	Key West	94.0	75.1	95-4	1881	72.0 01.0	1874, 1875 1882, 1884
Georgia Do	Augusta	99.1 94.0	63.7	105.0	1878	63.0	1874 1879
Idaho	Boisé City	95.8	49.5	103.0	1879 1882	39.0	1879 1881
DoIllinois	Lewiston Cairo	105.2 94.8	51.5 54.5	106.6	1882 1881	45.0 57.0	1882 1880, 1884
Do	Chicago			98.0	1874 1881	47.0	1872
Indiana	Indianapolis	95.1	47.7 56.0	101.0		48.0	1876 1880
Indian Territory Do	Fort Sill	103.5 97.5	54.0	105.0	1881	53.0	1000
Iowa	Dubuque	97.5 86.4	40.I	97.3	1881	41.0	1875
Do Kansas	Keokuk Leavenworth	97.5	49.1 52.0	102.0	1873 1871	47.0 50.0	1875 1884
Do	Dodge City	95.5	52.4	101.6	1881	50.0	1880
Kentucky Louisiana	Louisville New Orleans	90.7	52.4 69.6	104.6 90.5	1881	50.0 65.5	1880 1884
Do	Shreveport	93.7 100.7	61.8	105.0	1881	58.0	1880
Maine Do	Eastport	75-2 84.6	45-5	£8.o	1880	45.0	1880
Maryland	Portland Baltimore	93.5	47·5 53·4	95.0 98.0	1876	48.0 52.0	1874 1875
Massachusetts	Boston	93.5 68.8	47.2	96.8	1881	47.0	1875 1880
Do Michigan		83,1	42. I	93.0 96.0	1879 1879	45.0 34.7	188o 1883
Do	Detroit	86.0	48.4	98.8	1881	45.0	1875
Minnesota	Duluth Saint Paul	81.3	43.S	93.0	1881 1880	45.0	1876 1875
Do	Vicksburg	84.2 97.2	40.1 61.8	98.0 100.0	1878	43.0 62.0	1879
Missouri	Saint Louis	95.0	53.5	106.4	1881	54.0	1884 1881
Montana Do	Fort Benton Helena	104.9	40.9 38.3	108.0 95.0	1881	34.0	1880
Nebraska	North Platte	89.1	51.2	103.0	1878	42.0	1870
Do Nevada	Omaha Winnemucca	90.8	50.4 44.3	105.0	1874 1882	49.0 32.0	1877 1880
New Hampshire	Mount Washington	61.8	23.4	102.5 74.0	1872	20.0	1876
New Jersey	Atlantic City Sandy Hook	89.3	48.8	91.8	1881	53.0	1879 1874
New Mexico	Santa Fé	90.4 88.0	54.0 49.0	96.2 97.0	1881 1878	55.0 40.0	1882
New York	Buffalo	82.7	49.1	90.8	1871	44.0	1880
North Carolina	New York City Charlotte	89.6 93.5	51.0 55.8	96.0 100.5	1881	53.0 56.0	1874 1879
Do	Wilmington	93.5	60.0	9 9.0	1878	56.0	1874
Ohio Do		94.0 86.5	50.9 45.6	101.0 98.7	1881	55.0 45.6	18 72, 1875 1876
Oregon	Portland	94.5	47.5	94.2	1884	43.0	1876
Do	Roseburg	91.6	40.1	97.2	1884 1881	40.5 53.0	1852 1872
Pennsylvania Do	Philadelphia Pittsburg	94.6	51.1 47.4	99.0 99.8	1881	53.0 49.0	1876
Rhode Island	Block Island	81.9	52.9	82.0	1882	54.5	1884
Bouth Carolina	Newport Charleston	93.2	67.5	۶7.0 ! 97.5	1876, 1879 1881	52.0 62.0	1880 1879
Tennessee	Knoxville	92.8	56.2	100.0	1881	50.0	1879
Texas	Nashville Galveston	1.00	56.5	104.0 98.5	1874	54.7 70.0	1883 '77,'80,'82
Do	Fort Davis	95.0 97.0	72.5 55.8	100.0	1874 1884	47.0	1882
Utah	Salt Lake City	100.3	51.0	101.0	1875	44.0	1880
Vermont Virginia	Burlington Lynchburg	94.3	51.4	97.0 100.0	1876 1881	40.0 50.0	1880 1874
Do	Norfolk	94.3	60.4	99.0	1881	58.o	1874
Washington Ter	Dayton	108.7	45.0	8.101	1884 1884	36.0	1883 1880, 1882
West Virginia	Olympia Morgantown	92.2	44.2	92.0 92.2	1881	41.0	1874
		0					
Wisconsin	La Crosse	83.5	43.8	96.0	1874, 1881	44.0	1875
	Milwaukee	85.5 86.6	43.8 40.3 40.5	98.0 98.1	1874, 1881 1874 1882	42.0 31.0	1875 1875 1876

Dakota.—Pembina, 24th; Vermillion, 31st. Illinois.—Windsor, 14th, 26th; Swanwick, 26th; Bloomington, 27th.

Indiana.—Logansport and Spiceland, 15th; Guilford, 27th,

Iowa .- Dubuque, Cresco, Independence, Manchester and Maynard, 26th.

Maine.—Bangor, light frosts were reported at points along the river north of station on the 26th and 27th; Buckfield, 26th; Gardiner, 26th, 28th; Cornish, 27th, 28th.

Massachusetts.—Worcester, 26th, 27th; Rowe and Amherst,

27th; Heath, 27th, 28th; Taunton, 29th.

Michigan.—Traverse City, 14th; Buchanan, 14th, 26th; Grand Haven, East Tawas and Mottville, 15th; Manistique, 15th, 25th, 26th; Alpena, 24th; Escanaba, 25th; Thornville, 29th.

Minnesota. - Rochester and Northfield, 26th; Moorhead, 25th, 31st. The Signal Service observer at Saint Vincent reports that the first killing frost of the season occurred on the 24th, and that it is estimated that one-half of the wheat crop was ruined; a light frost occurred on the 31st.

New Hampshire.-Mount Washington, 8th, 16th, 20th, 25th

New York.—Humphrey, 17th; Le Roy, 25th, 26th; Factoryville and Ithaca, 26th; Cooperstown, 27th, 28th.

Ohio.—Wauseon, 16th, 27th; Yellow Springs, 26th, 27th, 28th; Garrettsville, 28th.

Pennsylvania.—Pittsburg, light frost is reported to have occurred in the suburbs on the 27th, and at various places in the western part of the state on the morning of the 28th; Troy, 16th, 25th; Wellsborough and Grampian Hills, 27th; Chambersburg and South Bethlehem, 27th, 28th; Drifton and Dyberry, 28th.

Rhode Island .- Narragansett Pier, 28th.

Vermont.—Newport and Brattleborough, 8th; Strafford and Woodstock, 26th, 27th, 28th; Charlotte and Post Mills, 27th,

Virginia.—Snowville, 26th, the first frost known to have occurred in August for the last twelve years.

Wisconsin.—Wausau, 25th, 26th; La Crosse, Embarras and Neillsville, 26th. The cautionary signal displayman at Green Bay, reports that about one-third of the cranberry crop in the vicinity of Peshtigo, Marinette county, was destroyed by frosts on the 25th and 26th.

Wyoming.—Fort Bridger, 29th.

PRECIPITATION.

[Expressed in inches and hundredths.]

The distribution of rainfall over the United States and Canada for August, 1885, as determined from reports from more than eight hundred stations, is exhibited on chart iii.

In the following table are shown, for the several geographical districts, the normal August precipitation for a series of years, the average for August, 1885, and the excess or deficiency as compared with the normal:

Average rainfall for August, 1885.

Districts.	Signal-	for August, Service ob- ations,	Comparison of August, 1885, with the av-	
	For sev- eral years	For 1885.	erage for sev- eral years.	
	Inches.	Inches	Inches,	
New England	3.42	6.41	+2.42	
Middle Atlantic States	4.91	4.88		
South Atlantic States		7.67	+1.3	
Florida Peninsula		6.74	—o.ga	
Eastern Gulf States		5.43	— 0.0i	
Western Gulf States	3.92	1.82	-2,10	
Rio Grande Valley		1.52	-3.14	
Tennessee		2.71	ī.oć	
Ohio Valley	3 - 37	4.61	+1.24	
Lower lake region		5.10	2.04	
Upper lake region	3.11	5.22	- -2.11	
Extreme northwest			-1.52	
Upper Mississippi Valley	3.21	5.48	+2.22	
Missouri Valley	3.02	6.04	+3.00 +0.47	
Northern slope	1.38	1.85	+0.47	
Middle slope	2.58		+1.59	
Southern slope	3.87	3.66	<u></u> -0.2i	
Southern plateau	2.98	1.69	-1.29	
Middle plateau	0.47	0.47	0.00	
Northern plateau	0.29	0.19	0.10	
North Pacific coast region	0.69	trace.	-0.6g	
Middle Pacific coast region	0.04	0,20	-∔0.16	
South Pacific coast region	0.10	0.06	<u>.</u> -0.04	

With the exception of the extreme northwest, the precipitation for August, 1885, was unusually large over the central and northern portions of the country east of the one hundred and fifth meridian; it was also very heavy along the coasts of South Carolina and Georgia. At Charleston, South Carolina,